

REMARKS

In light of the above amendments and following remarks, reconsideration and allowance of this application are respectfully requested.

I. STATUS OF THE CLAIMS AND FORMAL MATTERS

Claims 1-14 are pending in this application and are rejected in the Office Action. In this response, claims 1 and 4 have been amended and claims 2 and 3 have been cancelled.

It is submitted that these claims are patentably distinct from the prior art cited by the Examiner, and that these claims are in full compliance with the requirements of 35 U.S.C. §112. The remarks made herein are not made for the purpose of patentability within the meaning of 35 U.S.C. §§ 101, 102, 103 or 112, but rather the amendments and remarks made herein are simply for clarification and to round out the scope of protection to which Applicants are entitled.

In numbered paragraph 2 of the Office Action, the Examiner objects to the Oath or Declaration as being defective for failing to identify the mailing addresses of the inventors. On January 28, 2002, a response to a Notice to File Missing Parts of Nonprovisional Application dated January 17, 2002, was mailed to the USPTO that included an executed Declaration for the instant application. A review of our copy of the Declaration and the copy of the Declaration that is available on the USPTO website, indicates that the mailing addresses for both of the inventors are included. Accordingly, it respectfully requested that the objection be withdrawn.

In numbered paragraph 3 of the Office Action, the Examiner objects to the drawings. Substitute drawings under the title “Replacement Sheet” are being submitted herewith to address the Examiner’s objections that the lines, numbers and letters are not uniformly thick and well defined.

IN THE DRAWINGS:

Kindly replace the current drawings with the enclosed drawings entitled "Replacement Sheet," without prejudice, without admission, without surrender of subject matter, and without any intention of creating any estoppel as to equivalents.

In numbered paragraph 4 of the Office Action, the Examiner objects to the specification for not replacing the referenced application serial numbers with the issued patent numbers. Since the drafting of the instant application, three of the referenced applications have issued as patents. The specification is amended to reflect the issued patent numbers.

No new subject matter is added as a result of the amended claims, amended specification, or replacement drawings.

II. THE REJECTIONS UNDER 35 U.S.C. § 102(b) 35 U.S.C. § 103(a)

In numbered paragraph 6 of the Office Action, claims 1-6, 9, 11 and 13-14 are rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 2,613,169 to Cunningham (“Cunningham”). In numbered paragraph 8 of the Office Action, claims 7, 8, 10 and 12 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Cunningham in view of U.S. Patent No. 3,178,050 to Doerpinghaus. The rejections are traversed for at least the following reasons.

Amended independent claim 1 of the Applicant’s invention recites:

and; clamping mechanism for closing said opening, said mechanism having a receiving portion in which said end is inserted between a ring portion having an enlarged radially extending member which is curved and extends outward and a ring receiving surface and thereafter a clamping force is placed thereon clamping said end between said ring portion and said ring receiving surface thereby affixing said mechanism to said end. (Emphasis added).

Cunningham fails to disclose a clamping mechanism comprising a ring portion having an enlarged radially extending member which is curved and extends outward and a ring receiving surface.

The Examiner asserts that Cunningham discloses a clamping mechanism made up of a ring portion 54 and a ring receiving surface 56 as characterized by the Examiner. The “ring portion 54,” however, does not have “an enlarged radially extending member which is curved

and extends outward" as required by amended claim 1 of the instant application. Instead, as depicted in Figure 7, the "ring portion 54" of Cunningham is flat.

The enlarged radially extending curved member of the ring portion of the instant invention is significant. It includes a conical or curved portion at its end. Page 8, line 3. The conical geometry generates higher compressive load in the fabric than a simple flat plate would with the same axial load and has a self-centering tendency when loaded. Page 8, lines 20-22. In addition, the curved portions of the ring portion and the ring receiving surface are diverging and impart a gentle transitional geometry which results in reduced stress concentrations in the fabric as well as an improved durability of the fabric. Page 8, lines 25-28. Therefore, the shape of the ring portion of the instant invention allows the clamping mechanism to more effectively seal the vessel as well as results in less damage to the vessel fabric, which increases fabric durability.

Moreover, the clamping force on the fabric in the instant invention is provided by a clamping device that passes through the ring portion and ring receiving surface. In one embodiment, clamping force is provided by a nut 56 that is threaded down on a clamping screw 52. Page 8, lines 7-11. When the clamping screw 52 is tightened, a clamping force is generated on the fabric that is positioned between curved portion 44 of the ring portion 36 and beveled surface 48 of ring receiving surface 6, resulting in a seal between two sides of the fabric. Page 8, lines 16-17. When a clamping force is applied, however, the curved portion 44 and beveled surface 48 do not rotate with respect to one another. Instead, as the clamping screw 52 is tightened, the surfaces are brought closer to one another while remaining rotationally fixed. In additional embodiments, clamping force can be generated by, but not limited to, a spring clamp with air or hydraulic release or an over-center locking device. Page 9, lines 1-4. In the instant invention, the clamping means or device, ring portion and ring receiving surface are all separate

devices or structures. Therefore, the curved portion 44 and beveled surface 48 do not rotate when a clamping force is applied. Since the surfaces in contact with the fabric do not rotate with respect to one another, regardless of the type of clamping device used, they will not abrade the fabric, which results in increased fabric durability.

The clamping mechanism in Cunningham, however, does not operate in a like manner. Instead, for a clamping force to be applied to a fabric, “[t]he nut 56 having wrench holes 57 is engaged with the threaded post 54 and screwed down to clamp the parts firmly in place.” Col. 11, lines 16-19. In this configuration, as depicted in Figure 7, the nut 56 provides the flat clamping surface in contact with the container material. The clamping device (nut 56) and the flat clamping surface are not separate. Instead, they are one structure. Therefore, as the nut 56 is tightened down, the nut surface in contact with the container material rotates or turns. This causes the flat surface of the nut 56 to contact the container material that is being clamped and possibly abrade it, which results in decreased fabric durability.

For at least the foregoing reasons, it is respectfully submitted that amended independent claim 1 patentably distinguishes over Cunningham and is therefore allowable. Further, claims 4-14 that depend from claim 1 are allowable therewith.

The Examiner has apparently made of record, but not applied, several documents. The Applicants appreciate the Examiner’s implicit finding that these documents, whether considered alone or in combination with others, do not render the claims of the present invention unpatentable.

Statements appearing above with respect to the disclosures in the cited references represent the present opinions of the Applicant’s undersigned attorney and, in the event that the Examiner disagrees with any such opinions, it is respectfully requested that the Examiner

specifically indicate those portions of the respective reference providing the basis for a contrary view.

CONCLUSION

In view of the foregoing, it is believed that all of the claims in this application are patentable over the prior art, and an early and favorable consideration thereof is solicited.

Please charge any fees incurred by reason of this response and not paid herewith to Deposit Account No. 50-0320.

Respectfully submitted,
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